

PC® 88 adhesive Component 2

Material Safety Data Sheet

October 6, 2009

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PC® 88 Adhesive Component 2

Manufacturer/Supplier:

Pittsburgh Corning Corporation

800 Presque Isle Drive

Pittsburgh, PA 15239

Information Number: 724-327-6100

CHEMTREC: 800/424-9300

Generic Name: solvent based adhesive/sealant

Use: PC® 88 Adhesive Component 2 is part 2 of a two part adhesive used to bond FOAMGLAS® insulation to itself or to other porous or nonporous substrates.

General Comments: General information and emergency information available 8:00 AM – 5:00 PM Monday through Friday.

CHEMTREC telephone number is to be used only in the event of chemical transportation emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to technical service.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	App. % by wt.	CAS #
4,4'-Diphenylmethane diisocyanate	35-45	101-68-8
Polymeric Diphenyl Diisocyanate	20-30	9016-87-9
Polyisocyanate based on MDI	20-30	Proprietary
Diphenylmethane Diisocyanate (MDI)	5-15	26447-40-5
Phenyl isocyanate	<5	103-71-9

SECTION 3 – HAZARDOUS IDENTIFICATION

HAZARDOUS POLYMERIZATION: Will Not Occur

ROUTES OF EXPOSURE: Inhalation, Skin, Eyes and Ingestion.

IMMEDIATE EFFECTS:

INHALATION: Isocyanate vapors or mist at concentrations above the TLV can irritate (burning sensation) the mucus membranes in the respiratory tract, causing runny nose, sore throat, coughing, chest discomfort, shortness of breath, and reduced lung function.

SKIN CONTACT: Prolonged contact to skin can cause reddening, swelling, rash, itching, and in some cases skin sensitization. Contact with MDI can cause skin discoloration.

EYE CONTACT: Causes irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury.

INGESTION: May cause irritation: Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

PC® 88 adhesive Component 2
Material Safety Data Sheet

October 6, 2009

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

- ACUTE: Diisocyanate vapors or mists at concentrations above or below the TLV and PEL can irritate (burning sensation) the mucus membranes in the respiratory tract causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function.
- CHRONIC: As a result of previous repeated overexposures of a single large dose, certain individuals may develop sensitization to diisocyanates (asthma-like symptoms). These symptoms, which can include chest tightness, wheezing, cough, shortness of breath or asthmatic attack. Sensitization can be permanent. Chronic overexposure to diisocyanates has also been reported to cause lung damage. Prolonged contact to skin can cause reddening, swelling, rash, itching, and in some cases skin sensitization. Prolonged vapor contact may cause conjunctivitis.

SECTION 4 – FIRST AID MEASURES

GENERAL ADVICE:

- INHALATION: Move to an area free of further exposure. **GET MEDICAL ATTENTION IMMEDIATELY.** Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening.
- SKIN CONTACT: Immediately remove contaminated clothing and shoes. Wash off with soap and water. Use lukewarm water if possible. Wash contaminated clothing before reuse. For severe exposures, immediately get safety shower and begin rinsing. Get medical attention if irritation develops.
- EYE CONTACT: Remove contact lenses. In case of contact flush eyes immediately with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that the eyelids are separated and that the eye is being irrigated, **GET MEDICAL ATTENTION.**
- INGESTION: Do not induce vomiting. Wash mouth out with water. **GET MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.**

SECTION 5 – FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Foam, Carbon Dioxide, or dry chemical. If entering a confined area, use self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots and gloves) If contact is likely change to full chemical resistant clothing with SCBA. If this will not provide sufficient fire protection, consider fighting from a remote location. Water is not recommended, but may be applied in large quantities as a fine spray when extinguishing agents are not available. Stay upwind. Keep out of low areas where gases (fumes) can accumulate. Do not use direct water stream, which may spread fire. Use water spray to cool containers and fire affected zone until fire is out. Move containers from fire area if this is possible without hazard.

During a fire, smoke may contain the original material in addition to unidentified toxic and/or irritating compounds. Hazardous combustion products may include but are not limited to: nitrogen oxides, isocyanates, hydrogen cyanide, carbon monoxide, and carbon dioxide. Dense smoke is produced when it burns. At temperatures greater than 204°C (400°F) isocyanates can polymerize and decompose, which can cause pressure build up in closed containers. Explosive rupture is possible. Therefore, use clod water to cool fire exposed containers. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Product reacts with water. This reaction may be violent. Reaction may produce heat or gases

PC® 88 adhesive Component 2
Material Safety Data Sheet

October 6, 2009

EXPLOSION DATA:

SENSITIVITY TO MECHANICAL IMPACT: Stable.
SENSITIVITY TO STATIC DISCHARGE: Stable.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PRECAUTIONS FOR PERSONNEL: Wear protective equipment including chemical splash goggles, coat, paints, boots, and gloves). If TLV is exceeded wear SCBA equipment.

ENVIRONMENTAL PRECAUTIONS: Contain the spill to prevent spread into drains, sewers, water supplies, or soil. Collect material in open-head containers. Disposal should be made in accordance with Federal, State and Local regulations.

PROCESS FOR CLEANING: Evacuate non-emergency personnel. Isolate the area and prevent access. Remove Ignition sources. Notify management. Put on protective equipment. Control source of leak. Ventilate. Contain the spill to prevent spread into drains, sewers, water supplies, or soil. Cover spilled area with suitable absorbent material (Kitty Litter, Oil-Dri, etc). Saturate absorbent material with neutralization solution and mix. Wait 15 minutes. Collect material in open-head containers. Repeat application of decontaminating solution, with scrubbing, followed by absorbent until surface id decontaminated.

Neutralization Solutions:

- (1) Colorimetric Laboratories INC (CLI) decontamination solution.
- (2) A mixture of 75% water, 20 % nonionic surfactant (e.g. Poly-Tergent SL-62, Tergitol TMN-10) and 5% n-propanol
- (3) A mixture of 90% water, 3-8% concentrated ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Avoid direct contact with product. Do not breathe vapors, mists or dusts. Use adequate ventilation to keep airborne isocyanate levels below exposure limits. Wear respiratory protection if material is heated, sprayed, used in a confined space, or exposure limit is exceeded. This material can produce an asthmatic sensitization. Individuals with lung or breathing problems or prior allergic reactions must not be exposed to vapor or mists. Avoid contact with skin and eyes. Wear appropriate eye and skin protection. Wash thoroughly after handling.

STORAGE: Store away from ignition sources and open flames. Store in tightly closed containers to prevent moisture contamination. Recommended to be stored between 18-30°C (64-86°F).

SECTION 8 – EXPOSURE RESTRICTIONS AND PERSONAL PROTECTION

EXPOSURE LIMITS

Ingredient	App. % by wt.	TLV	NIOSH REL TWA	PEL	CAS #
4,4'-Diphenylmethane diisocyanate	35-45	0.02 ppm	0.005 ppm	0.02 ppm	101-68-8
Polymeric Diphenyl Diisocyanate	20-30	NE	NE	NE	9016-87-9
Polyisocyanate based on MDI	20-30	NE	NE	NE	Proprietary
Diphenylmethane Diisocyanate (MDI)	5-15	NE	NE	NE	26447-40-5
Phenyl isocyanate	<5	NE	NE	NE	103-71-9

ADDITIONAL ADVICE: No special clothes are required, but do wear gloves.

PC® 88 adhesive Component 2
Material Safety Data Sheet

October 6, 2009

SECTION 9 – PHYSICAL PROPERTIES

Freezing Point: °C (°F)	NA	Flash Point : °C (°F) TCC	177(350)
Boiling Point: °C (°F)	208 (406)	Ignition Temperature: °C (°F)	UN
Vapor Pressure (mm Hg):	NE	Flammable Limits: LEL	NA
		UEL	NA
Vapor Density (Air = 1)	8.5	Specific Gravity (H ₂ O = 1):	1.23
Solubility in Water:	Insoluble	Percent Volatile By Volume (%)	Nil
Appearance and Odor:	Dark brown liquid with slightly musty odor	pH:	NA
		Evaporation Rate (BuAC=1)	Nil

SECTION 10 – STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Open Flame and contact with strong oxidizing agents

MATERIALS TO AVOID: None known

DECOMPOSITION PRODUCTS: Carbon Monoxide, Carbon Dioxide and Oxides of Nitrogen.

SECTION 11 – TOXICOLOGICAL INFORMATION

CAS #	INGREDIENT	DERMAL LD50	INHALATION LD50	ORAL LD50
101-68-8	4,4'-Diphenylmethane diisocyanate	10,000mg/kg (rabbit)	369 mg/m ³ (rat)	NE
9016-87-9	Polymeric Diphenyl Diisocyanate	9400 mg/kg (rabbit)	NE	10 g/kg (rat)
Proprietary	Polyisocyanate based on MDI	NE	NE	NE
26447-40-5	Diphenylmethane Diisocyanate (MDI)	NE	490 mg/m ³ (rat)	>2000 mg/m ³ (rat)

CAS #	INGREDIENT	CARCINOGENICITY		TERATOGENICITY	MUTAGENICITY
		ACGIH	IARC		
103-71-9	Phenyl isocyanate	NE	NE	NE	NE
101-68-8	4,4'-Diphenylmethane diisocyanate	NE	NE	NE	NE
9016-87-9	Polymeric Diphenyl Diisocyanate	NE	NE	NE	NE
Proprietary	Polyisocyanate based on MDI	NE	NE	NE	NE
26447-40-5	Diphenylmethane Diisocyanate (MDI)	NE	NE	NE	NE
103-71-9	Phenyl isocyanate	NE	NE	NE	NE

SECTION 12 – ECOLOGICAL INFORMATION

VOLATILE ORGANIC COMPOUNDS: 0 Grams Per Liter (g/l). 0 Pounds Per Gallon (lb/g).

PC® 88 adhesive Component 2
Material Safety Data Sheet

October 6, 2009

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be made in accordance with Federal, State and Local regulations.

SECTION 14 – TRANSPORT INFORMATION

SHIPPING CLASS: DOT: Not Regulated
IMDG: Regulated - UN 2206 - ISOCYANATE TOXIC N.O.S.
(DIPHENYLMETHANE,DIISOCYANTE) CLASS 6 PG III xx Kgs xx -10 OZ. CANS IN
xx CARDBOARD BOXES (PC® 88 ADHESIVE COMPONENT)

SECTION 15 – REGULATORY INFORMATION

SARA SECTION 302:
SARA (311,312) HAZARD CLASS:
SARA (313) CHEMICALS: 4,4'-Diphenylmethane
diisocyanate
CERCLA: NA
CPSC CLASSIFICATION:

HMIS: FLAMMABILITY: 1 REACTIVITY: 1 HEALTH: 2

NFPA: FLAMMABILITY: 1 REACTIVITY: 1 HEALTH: 2

WHMIS CLASSIFICATION: CLASS D Division 2B CLASS B Division 2

CALIFORNIA PROPOSITION 65:

- A. This product contains a chemical known to the State of CA to cause birth defects or other reproductive harm.
- B. This product contains a chemical known to the State of CA to cause cancer.
- C. This product contains a chemical known to the State of CA to cause cancer and birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

NA = not applicable NE = not established UN = unavailable CL = Ceiling Limit
NEGL = Negligible PROP. = Proprietary

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